AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph on page 9, lines 12-29 beginning with "Figure 6A-6C." as follows:

Figure 6A-6C. *C-Delta-1*-expressing cells do not incorporate BrdU. Of 612 *C-Delta-1*$^+$ cells, 581 were BrdU$^-$ (76 sections; 6 embryos). Figure 6a, Diagram showing how phase in the cell cycle is related to apico-basal position of the nucleus for cells in the neuroepithelium; S-phase nuclei lie basally (Fujita, 1963, J. Comp. Neurol. 120:37 42; Biffo et al., 1992, Histochem. Cytochem. 40:535 540). Nuclei are indicated by shading. Figure 6b, Section through the neural tube of a stage 9 embryo labelled for 2 h with BrdU showing *C-Delta-1* expressing cells ~~(dark on blue background)~~ and BrdU-labelled nuclei ~~(pink)~~. Labelled nuclei are predominantly basal, where DNA synthesis occurs, yet basal *C-Delta-1*-expressing cells are unlabelled. Figure 6c, Section through a stage 9 embryo incubated for 4h: many labelled nuclei have exited S-phase and have moved towards the lumen, but *C-Delta-1*-expressing cells are still basal and not labelled with BrdU.

Please amend the paragraph on page 10, lines 8-16 beginning with "Figure 11." as follows:

Figure 11. An alignment of human H-Delta-1 (top line) (SEQ ID NO:23) and chick C-Delta-1 (bottom line) (SEQ ID NO:95). The predicted amino acid sequence of human Delta (SEQ ID NO:23) is shown in the top line. The sequence of human Delta was determined by "eye", in which the sequence of the appropriate reading frame was determined by maximizing homology with C-Delta-1. No single reading frame shown in Figure 10 gave the correct sequence due to errors in the DNA sequence of Figure 10 that caused reading frameshifts.

Please amend the paragraph on page 36, line 26 to page 37, line 14 beginning with "In a specific embodiment" as follows:

In a specific embodiment, the invention relates to vertebrate *Delta* derivatives

and analogs, in particular *Delta* fragments and derivatives of such fragments, that comprise, or alternatively consist of, one or more domains of the *Delta* protein, including but not limited to the extracellular domain, signal sequence, region amino-terminal to the DSL domain, DSL domain, ELR domain, transmembrane domain, intracellular domain, and one or more of the EGF-like repeats (ELR) of the *Delta* protein (*e.g.*, ELRs 1-8) ~~(*e.g.*, ELRs 1-9)~~, or any combination of the foregoing. In particular examples relating to the chick and mouse *Delta* proteins, such domains are identified in Examples Section 6 and 7, respectively, and in Figures 3A-3B and 9A-9B. Thus, by way of example is provided, a molecule comprising an extracellular domain (approximately amino acids 1-545), signal sequence (approximately amino acids 1-17), region amino-terminal to the DSL domain (approximately amino acids 1-178), the DSL domain (approximately amino acids 179-223), EGF1 (approximately amino acids 229-260), EGF2 (approximately amino acids 261-292), EGF3 (approximately amino acids 293-332), EGF4 (approximately amino acids 333-370), EGF5 (approximately amino acids 371-409), EGF6 (approximately amino acids 410-447), EGF7 (approximately amino acids 448-485), EGF8 (approximately amino acids 486-523), transmembrane domain, and intracellular (cytoplasmic) domain (approximately amino acids 555-728) of a vertebrate *Delta*.

Please amend the paragraph on page 76, lines 5-37, beginning with "A human genomic" as follows:

A human genomic library with inserts ranging in size from 100-150 kb was probed with an EcoRI fragment of the mouse *Delta*-1 (M-*Delta*-1) gene. From the library a genomic human PAC clone was isolated which hybridized to the EcoRI fragment. Next, two degenerate oligonucleotides were used to amplify by PCR a fragment of the genomic human PAC clone. The degenerate oligos were:

5' ACIATGAA(C/T)AA(C/T)CTIGCIAA(C/T)TG (SEQ ID NO:89)

[encoding TMNNLANC (SEQ ID NO:90)] and

3′ AC(A/G)TAIACIGA(C/T)TG(A/G)TA(C/T)TTIGT (SEQ ID NO:91)

[encoding TKYQSVYV (SEQ ID NO:92)] or

3′ GC(A/G/T)ATIAC(A/G)CA(C/T)TC(A/G)TC(C/T)TT(C/T)TC

(SEQ ID NO:93) [encoding EKDECVIA (SEQ ID NO:25)].

On the basis of the cDNA sequences for chicken and mouse *Delta*-1, it was expected that fragments of approximately 354 and 387 base pairs would be isolated, using the 5′ and the two different 3′ oligos, respectively. In fact, however, two single isolates of 525 base pairs and another that was 30 base pairs smaller, as expected, were obtained. The larger isolate was sequenced by dideoxy sequencing. The nucleotide sequence is shown in Figures 10A-10B (SEQ ID NO:14). Also shown in Figures 10A-10B are the predicted amino acid sequences of the amplified DNA fragment (SEQ ID NOS:15-22) for the three different readings frames. Due to sequencing errors, the full uninterrupted sequence between both primers was not identified. As a consequence, one cannot predict the amino acid sequence directly from the DNA sequence obtained. However, Figure 11 shows the amino acid sequence homology between human *Delta*-1 (top line) (SEQ ID NO:23) and chick *Delta*-1 (bottom line) (SEQ ID NO:95) as determined by eye. Because of the sequencing errors, the homology was obtained by switching amongst the three different reading frames to identify the homologous regions.

Please delete pages 1-46 of the Sequence Listing submitted on May 2, 2005 and insert pages 1-46 of the second substitute Sequence Listing submitted herewith.